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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
GATES, ERIC ANDREW	

ART UNIT	PAPER NUMBER
3722	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/613,479	TO, CHUN YUEN	
	Examiner	Art Unit	
	Eric A. Gates	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3 July 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/22/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 20 and 21 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because it exceeds the maximum allowable length of 150 words. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: The specification is replete with grammatical and spelling errors that require correction. For example, on page 1, the last sentence of paragraph 3 requires correction.

Claim Objections

5. Claims 1-13 are objected to because of the following informalities: The claims are replete with grammatical and spelling errors that require correction. For example, in claim 1, "a elongated plate" and "rings for clasp said sheets" require correction.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1 recite the limitations "the cylindrical rods" and "the ring elements" in line 12. There is insufficient antecedent basis for these limitations in the claim.

b. Claims 2, 3 and 7 recite the limitation "said convex nesting portion" in line 4. There is insufficient antecedent basis for this limitation in the claims.

c. Claim 2 recites the limitation "said concave nesting portion" in line 5. There is insufficient antecedent basis for this limitation in the claim.

d. Claim 2 recites the limitation "the centrally protruding outwards nesting portion" in line 9. There is insufficient antecedent basis for this limitation in the claim.

e. Claim 7 recites the limitation "said concave nesting portion" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3-4, 6, and 9-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kissel (U.S. Patent 4,690,580).

10. Regarding claim 1, Kissel discloses a ring binder mechanism for binding the sheets of loose leaves, the mechanism comprising: an elongated plate 1 that extends longitudinally; hinge plates 11/12 supported by said elongated plate for pivotal rotating relative to the elongated plate; rings 2/3 for clasping said sheets of loose leaves, each of the rings comprising a pair 2 and 3 of half ring elements, and the pair of half ring elements being attached on said hinge plates and being movable between a closed position and an opened position via said hinge plates; wherein nesting portions 6/7 of free ends of said pair of half ring elements form a nesting configuration with a concave portion 6 and a convex portion 7 that are symmetrical about an axis line of the cylindrical rods of the ring elements, so that when the pair of half ring elements are in the closed condition, the nesting portions of said pair of half ring elements are aligned to each other and nested together tightly.

11. Regarding claim 3, Kissel discloses a ring binder mechanism according to claim 1, wherein the nesting portion with a centrally convex portion 7 is formed in a free end of one half ring element 3 of said pair of half ring elements, and the nesting portion with a centrally concave portion 6 is formed in a free end of the other engaging half ring element 2, said convex nesting portion has a protruding portion 7, the protruding portion is connected to a surface of the cylindrical rod of the half ring element via an annulus internal end surface 10, a diameter of the protruding portion 7 on the internal end surface 10 is smaller than that of the cylindrical rod of the half ring element 3, said concave nesting portion 6 has a opening 9 that is formed from its external end surface, a diameter of the opening 9 on the external end surface is smaller than that of the cylindrical rod of the half ring element 2 and slightly larger than that of said protruding portion 7 on its internal end surface, when the half ring elements are in the closed condition, the external end surface 9 of the concave nesting portion 6 and the internal end surface 8 of convex nesting portion 7 form a surface-engagement, so that the convex nesting portion is nested in the concave nesting portion.

12. Regarding claim 4, Kissel discloses a ring binder mechanism according to claim 3, wherein the protruding portion 8 of said convex nesting portion 7 has a conical shape, the opening of said concave nesting portion 6 has a conical hole 9 that is formed from its external end surface and an internal cylindrical hole 6 that is connected to said conical hole.

13. Regarding claim 6, Kissel discloses a ring binder mechanism according to claim 3, wherein the protruding portion 7 of said convex nesting portion 7 has a cylindrical

shape, and the opening of said concave nesting portion 6 has a shape of an internal cylindrical hole 6 (applicant does not require the hole to be cylindrical from the external end surface of the ring).

14. Regarding claim 9, Kissel discloses a ring binder mechanism according to claim 1, wherein one half ring element 2 or 3 of said pair of half ring elements of said ring binder mechanism has a straight side.

15. Regarding claim 10, Kissel discloses a ring binder mechanism according to claim 1, wherein two rings 2/3 are provided in said ring binder mechanism.

16. Regarding claim 11, Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are made of metal material (see page 1, line 24), and the metal material can be steel (the disclosed metal could certainly be steel).

17. Regarding claim 12, Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are made of plastic material (see page 1, lines 35-38).

18. Regarding claim 13, Kissel discloses a ring binder mechanism according to claim 1, wherein said rings 2/3 are formed integrally with said hinge plates 11/12 (see Figure 6).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kissel in view of Dorfman et al. (U.S. Patent 3,995,961).

21. Regarding claim 2, Kissel discloses a ring binder mechanism according to claim 1, wherein the nesting portion 7 with a centrally convex portion 7 is formed in a free end of one half ring element 3 of said pair of half ring elements, and the nesting portion 6 with a centrally concave portion 6 is formed in a free end of the other engaging half ring element 2, said convex nesting portion has an annular conical surface 7, said concave nesting portion has a conical hole 6, a diameter of the conical hole 6 on the external end surface is smaller than that of the cylindrical rod 2 of the half ring element 2, when the half ring elements are in the closed condition, the connecting portion between the external end surface of the concave nesting portion and the conical hole thereof engages with the annular conical surface of the convex nesting portion, so that the centrally convex nesting portion is nested in the centrally concave nesting portion.

22. Kissel does not disclose that the conical hole 6 is formed from the external end surface of the half ring element, or a cone angle of said conical hole is smaller than that of the annular conical surface of the centrally protruding outwards nesting portion. Dorfman et al. teaches the use of a conical hole (not labeled, see Figure 6) at the external end of a half ring element 30 (on right) for the purpose of retaining a conical protrusion on the end of half ring 30 (on left). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the binder mechanism of Kissel with the conical hole of Dorfman et al. in order to have a binder with simplified nesting portions.

23. Regarding the cone angle of the conical hole being smaller than that of the cone angle of the conical surface, applicant does not specifically state any advantage to this configuration. Applicant generally states that the embodiment of claim 2 creates a tighter engagement between the two nesting portions and aids in misalignment between the two, but from applicant's drawing in Figure 8, the cone angles of this embodiment does not appear to present any advantage over the cone angles of Kissel, and it has been held that the configuration of an invention is a matter of choice that a person of ordinary skill in the art would have found obvious unless there is persuasive evidence that the particular configuration of the claimed invention is significant. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Therefore it would have been obvious to one of ordinary skill in the art to have selected any cone angles necessary or expedient to create a better fit between the nesting portions.

24. Regarding claim 7, Kissel discloses a ring binder mechanism according to claim 1, wherein the nesting portion 7 with a centrally convex portion 7 is formed in a free end of one half ring element 3 of said pair of half ring element pairs, and the nesting portion 6 with a centrally concave portion 6 is formed in a free end of the other engaging half ring element 2, said convex nesting portion has a protruding conical portion 7, the conical portion is connected to a surface of the cylindrical rod of the half ring element via an annulus internal end surface 10, a diameter of the conical portion 7 on the internal end surface is smaller than that of the cylindrical rod of the half ring element 3, said concave nesting portion has a conical hole 6, a diameter of the conical hole on the external end surface is smaller than that of the cylindrical rod 2 of the half ring element

and substantially equal to that of said protruding conical portion 7 on the internal end surface, when the half ring elements are in the closed condition, the external end surface 8 of the concave nesting portion 7 and the internal end surface (not labeled, see Figure 4) of the convex nesting portion 6 form a surface-engagement, and the conical portion 7 of the convex nesting portion 7 and the conical hole 6 of the concave nesting portion 6 form an engagement, so that the concave nesting portion is nested in the convex nesting portion.

25. Kissel does not disclose the conical hole is formed from the external end surface of ring element. Dorfman et al. teaches the use of a conical hole (not labeled, see Figure 6) at the external end of a half ring element 30 (on right) for the purpose of retaining a conical protrusion on the end of half ring 30 (on left). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the binder mechanism of Kissel with the conical hole of Dorfman et al. in order to have a binder with simplified nesting portions.

26. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kissel in view of To et al. (U.S. Patent Publication 2003/0044221 A1).

27. Regarding claim 5, Kissel discloses a ring binder mechanism according to claim 4, the opening of said concave nesting portion 6 has a conical hole 9 that is formed from its external end surface and an internal cylindrical hole 6 that is connected to said conical hole 9. Kissel does not disclose that the protruding portion of said convex nesting portion has a shape that consists of a cylindrical tip and an arc-shaped annular conical base portion.

28. To et al. teaches the use of a protruding portion 52 of a half ring element 48 that has a shape consisting of a cylindrical tip and an arc-shaped annular conical base portion (see Figure 2 and paragraph 26) for the purpose of providing improved alignment and mating with the corresponding recess on ring 50. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the binder mechanism of Kissel with the protruding portion of To et al. in order to have a binder with nesting portions that fit and align better.

29. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kissel.

30. Regarding claim 8, Kissel discloses the invention substantially as claimed, except Kissel does not disclose that the pair of half ring elements of said ring binder mechanism form a circular ring. However, it is well known in the art to use ring elements that form a circular ring for the purpose of having a binder in which the pages turn more freely. Therefore, examiner takes official notice that it would have been obvious at the time the invention was made for one of ordinary skill in the art to have combined the binder mechanism of Kissel with a circular ring in order to have a stable ring binder, due to the ring engagement, that allows for easier page turning.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references pertain to binding mechanisms related to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is 571-272-5498. The examiner can normally be reached on Monday-Thursday 7:45-5:15 & alt Fridays 7:45-4:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric A. Gates
Patent Examiner
Art Unit 3722

EAG
1 December 2005

BOYER D. ASHLEY
PRIMARY EXAMINER